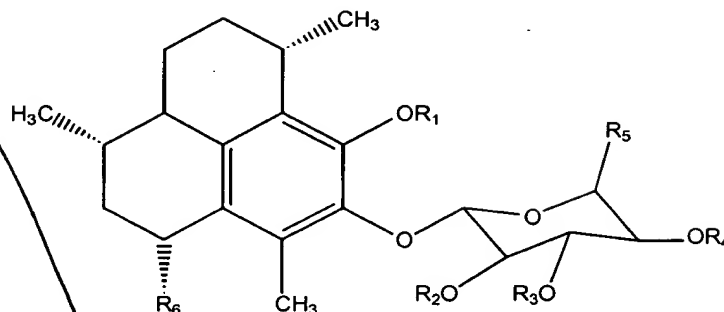


What is claimed is:

1. A compound having the structural formula:

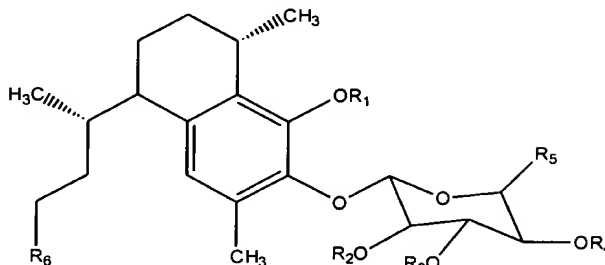


wherein  $R_1$  is a hydrogen, alkyl, aryl, hydroxyalkyl, cycloalkyl, cycloalkenyl, carboxylic acid, alkylamino or amide group having from 2 to 20 carbon atoms,  $R_2$ ,  $R_3$ , and  $R_4$  are each independently hydrogen or an acyl residue having from 1 to 6 carbon atoms,  $R_5$  is hydrogen,  $CH_3$ , or  $CH_2OH$ , and  $R_6$  is an organo group.

2. The compound of claim 1, wherein  $R_2$  is acetate.
3. The compound of claim 1, wherein  $R_3$  is acetate.
4. The compound of claim 1, wherein  $R_4$  is acetate.
5. The compound of claim 1, wherein  $R_6$  is a hydrocarbon having from 1 to 10 carbon atoms.
6. The compound of claim 1, wherein  $R_6$  is 2-methyl-1-propene.
7. The compound of claim 1, wherein  $R_1$  is hydrogen, methyl or ethyl.
8. The compound of claim 2, wherein  $R_1$ ,  $R_3$ ,  $R_4$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.
9. The compound of claim 3, wherein  $R_1$ ,  $R_2$ ,  $R_4$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

10. The compound of claim 4, wherein  $R_1$ ,  $R_2$ ,  $R_3$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

11. A compound having the structural formula:



wherein  $R_1$  is a hydrogen, alkyl, aryl, hydroxyalkyl, cycloalkyl, cycloalkenyl, carboxylic acid, alkylamino or amide group having from 2 to 20 carbon atoms,  $R_2$ ,  $R_3$ , and  $R_4$  are each independently hydrogen or an acyl residue having from 1 to 6 carbon atoms,  $R_5$  is hydrogen,  $CH_3$ , or  $CH_2OH$ , and  $R_6$  is an organo group.

12. The compound of claim 11, wherein  $R_2$  is acetate.

13. The compound of claim 11, wherein  $R_3$  is acetate.

14. The compound of claim 11, wherein  $R_4$  is acetate.

15. The compound of claim 11, wherein  $R_6$  is a hydrocarbon having from 1 to 10 carbon atoms.

16. The compound of claim 11, wherein  $R_6$  is 2-methyl-1-propene.

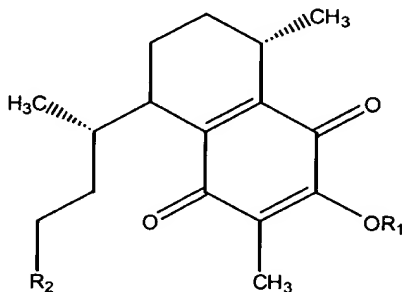
17. The compound of claim 11, wherein  $R_1$  is hydrogen, methyl, or ethyl.

18. The compound of claim 12, wherein  $R_1$ ,  $R_3$ ,  $R_4$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

19. The compound of claim 13, wherein  $R_1$ ,  $R_2$ ,  $R_4$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

20. The compound of claim 14, wherein  $R_1$ ,  $R_2$ ,  $R_3$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

21. A compound of the structural formula:

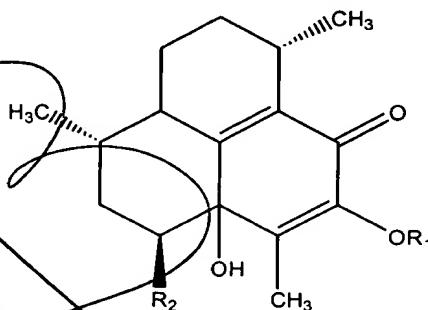


wherein  $R_1$  is a hydrogen or an alkyl or acyl residue having from 1 to 6 carbon atoms, and  $R_2$  is an organo group.

22. The compound of claim 21, wherein  $R_1$  is hydrogen and  $R_2$  is 2-methyl-1-propene.

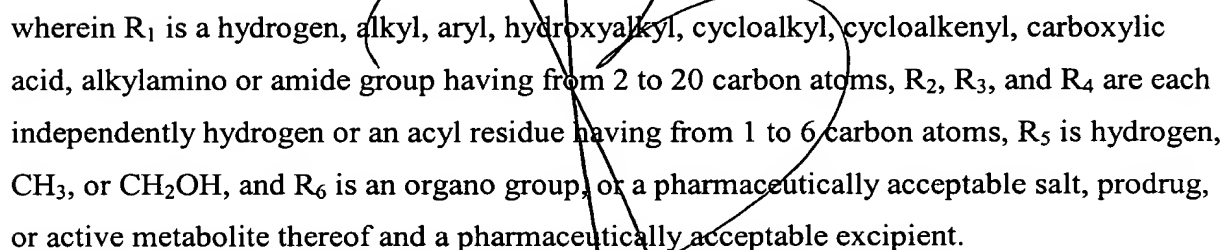
23. The compound of claim 21, wherein  $R_2$  is a hydrocarbon having from 1 to 10 carbon atoms.

24. The compound of the structural formula:



wherein  $R_1$  is a hydrogen or an alkyl or acyl residue having from 1 to 6 carbon atoms, and  $R_2$  is an organo group.

- |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |        |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 | 2101 | 2102 | 2103 | 2104 | 2105 | 2106 | 2107 | 2108 | 2109 | 2110 | 2111 | 2112 | 2113 | 2114 | 2115 | 2116 | 2117 | 2118 | 2119 | 2120 | 2121 | 2122 | 2123 | 2124 | 2125 | 2126 | 2127 | 2128 | 2129 | 2130 | 2131 | 2132 | 2133 | 2134 | 2135 | 2136 | 2137 | 2138 | 2139 | 2140 | 2141 | 2142 | 2143 | 2144 | 2145 | 2146 | 2147 | 2148 | 2149 | 2150 | 2151 | 2152 | 2153 | 2154 | 2155 | 2156 | 2157 | 2158 | 2159 | 2160 | 2161 | 2162 | 2163 | 2164 | 2165 | 2166 | 2167 | 2168 | 2169 | 2170 | 2171 | 2172 | 2173 | 2174 | 2175 | 2176 | 2177 | 2178 | 2179 | 2180 | 2181 | 2182 | 2183 | 2184 | 2185 | 2186 | 2187 | 2188 | 2189 | 2190 | 2191 | 2192 | 2193 | 2194 | 2195 | 2196 | 2197 | 2198 | 2199 | 2200 | 2201 | 2202 | 2203 | 2204 | 2205 | 2206 | 2207 | 2208 | 2209 | 2210 | 2211 | 2212 | 2213 | 2214 | 2215 | 2216 | 2217 | 2218 | 2219 | 2220 | 2221 | 2222 | 2223 | 2224 | 2225 | 2226 | 2227 | 2228 | 2229 | 2230 | 2231 | 2232 | 2233 | 2234 | 2235 | 2236 | 2237 | 2238 | 2239 | 2240 | 2241 | 2242 | 2243 | 2244 | 2245 | 2246 | 2247 | 2248 | 2249 | 2250 | 2251 | 2252 | 2253 | 2254 | 2255 | 2256 | 2257 | 2258 | 2259 | 2260 | 2261 | 2262 | 2263 | 2264 | 2265 | 2266 | 2267 | 2268 | 2269 | 2270 | 2271 | 2272 | 2273 | 2274 | 2275 | 2276 | 2277 | 2278 | 2279 | 2280 | 2281 | 2282 | 2283 | 2284 | 2285 | 2286 | 2287 | 2288 | 2289 | 2290 | 2291 | 2292 | 2293 | 2294 | 2295 | 2296 | 2297 | 2298 | 2299 | 2300 | 2301 | 2302 | 2303 | 2304 | 2305 | 2306 | 2307 | 2308 | 2309 | 2310 | 2311 | 2312 | 2313 | 2314 | 2315 | 2316 | 2317 | 2318 | 2319 | 2320 | 2321 | 2322 | 2323 | 2324 | 2325 | 2326 | 2327 | 2328 | 2329 | 2330 | 2331 | 2332 | 2333 | 2334 | 2335 | 2336 | 2337 | 2338 | 2339 | 2340 | 2341 | 2342 | 2343 | 2344 | 2345 | 2346 | 2347 | 2348 | 2349 | 2350 | 2351 | 2352 | 2353 | 2354 | 2355 | 2356 | 2357 | 2358 | 2359 | 2360 | 2361 | 2362 | 2363 | 2364 | 2365 | 2366 | 2367 | 2368 | 2369 | 2370 | 2371 | 2372 | 2373 | 2374 | 2375 | 2376 | 2377 | 2378</ |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|



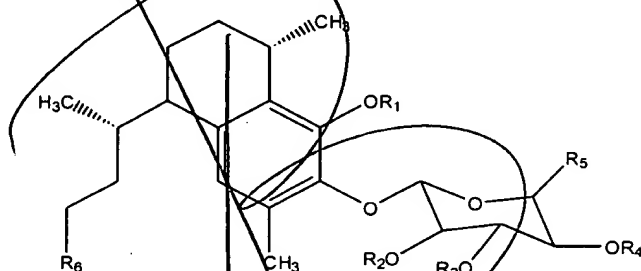
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33. The pharmaceutical composition of claim 27, wherein  $R_1$ ,  $R_3$ ,  $R_4$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

34. The pharmaceutical composition of claim 27, wherein  $R_1$ ,  $R_2$ ,  $R_4$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

35. The pharmaceutical composition of claim 27, wherein  $R_1$ ,  $R_2$ ,  $R_3$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

36. A pharmaceutical composition comprising a therapeutically effective amount of a compound having the structural formula:



wherein  $R_1$  is a hydrogen, alkyl, aryl, hydroxyalkyl, cycloalkyl, cycloalkenyl, carboxylic acid, alkylamino or amide group having from 2 to 20 carbon atoms,  $R_2$ ,  $R_3$ , and  $R_4$  are each independently hydrogen or an acyl residue having from 1 to 6 carbon atoms,  $R_5$  is hydrogen,  $CH_3$ , or  $CH_2OH$ , and  $R_6$  is an organo group, or a pharmaceutically acceptable salt, prodrug, or active metabolite thereof and a pharmaceutically acceptable excipient.

37. The pharmaceutical composition of claim 36, wherein  $R_2$  is acetate.

38. The pharmaceutical composition of claim 36, wherein  $R_3$  is acetate.

39. The pharmaceutical composition of claim 36, wherein  $R_4$  is acetate.

40. The pharmaceutical composition of claim 36, wherein  $R_6$  is 2-methyl-1-propene.

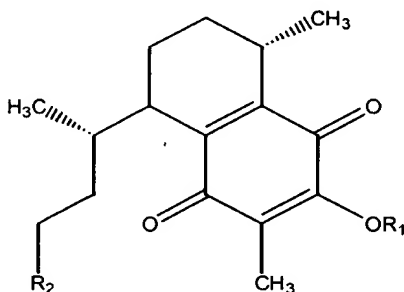
41. The pharmaceutical composition of claim 36, wherein  $R_1$  is hydrogen, methyl, or ethyl.

42. The pharmaceutical composition of claim 36, wherein  $R_1$ ,  $R_3$ ,  $R_4$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

43. The pharmaceutical composition of claim 36, wherein  $R_1$ ,  $R_2$ ,  $R_4$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

44. The pharmaceutical composition of claim 36, wherein  $R_1$ ,  $R_2$ ,  $R_3$ , and  $R_5$  are hydrogen, and  $R_6$  is 2-methyl-1-propene.

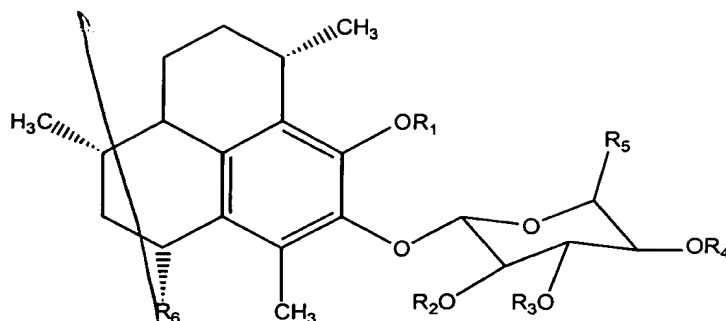
45. A pharmaceutical composition comprising a therapeutically effective amount of a compound of the structural formula:



wherein  $R_1$  is a hydrogen or an alkyl or acyl residue having from 1 to 6 carbon atoms, and  $R_2$  is an organo group, or a pharmaceutically acceptable salt, prodrug, or active metabolite thereof and a pharmaceutically acceptable excipient.

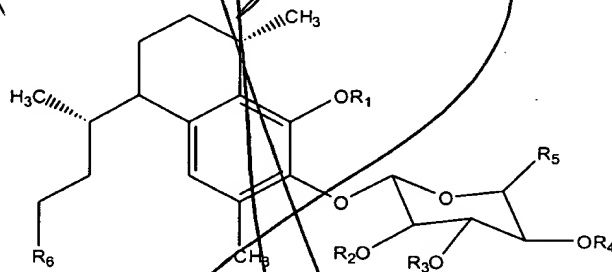
46. The compound of claim 45, wherein  $R_1$  is hydrogen and  $R_2$  is 2-methyl-1-propene.

47. A method for treating, preventing or inhibiting a disease or disorder associated with inflammation, cell-proliferation or pain in a subject comprising administering to the subject a therapeutically effective amount of a compound having the structural formula:



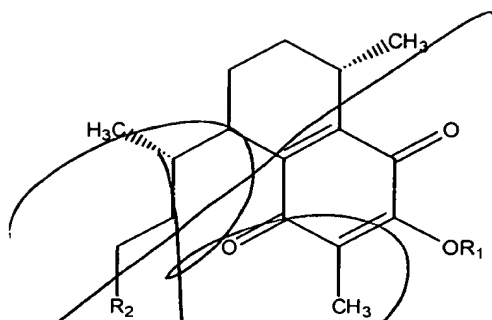
wherein  $R_1$  is a hydrogen, alkyl, aryl, hydroxyalkyl, cycloalkyl, cycloalkenyl, carboxylic acid, alkylamino or amide group having from 2 to 20 carbon atoms,  $R_2$ ,  $R_3$ , and  $R_4$  are each independently hydrogen or an acyl residue having from 1 to 6 carbon atoms,  $R_5$  is hydrogen,  $CH_3$ , or  $CH_2OH$ , and  $R_6$  is an organo group.

48. A method for treating, preventing or inhibiting a disease or disorder associated with inflammation, cell-proliferation or pain in a subject comprising administering to the subject a therapeutically effective amount of a compound having the structural formula:



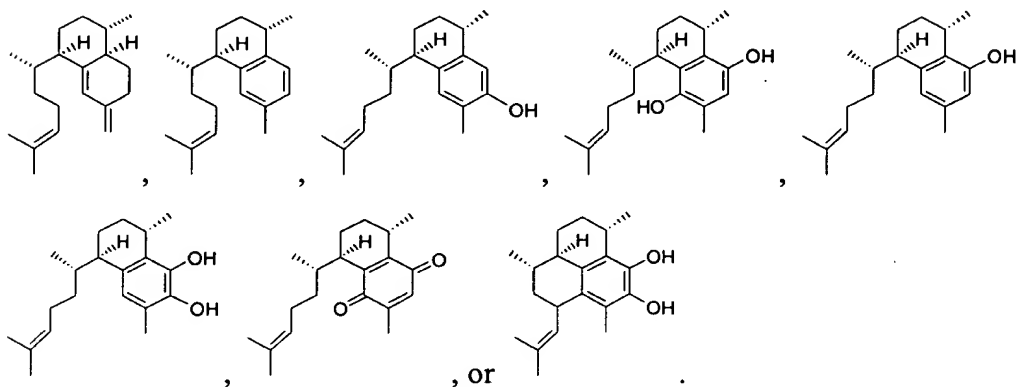
wherein  $R_1$  is a hydrogen, alkyl, aryl, hydroxyalkyl, cycloalkyl, cycloalkenyl, carboxylic acid, alkylamino or amide group having from 2 to 20 carbon atoms,  $R_2$ ,  $R_3$ , and  $R_4$  are each independently hydrogen or an acyl residue having from 1 to 6 carbon atoms,  $R_5$  is hydrogen,  $CH_3$ , or  $CH_2OH$ , and  $R_6$  is an organo group.

49. A method for treating, preventing or inhibiting a disease or disorder associated with inflammation, cell-proliferation or pain in a subject comprising administering to the subject a therapeutically effective amount of a compound having the structural formula:

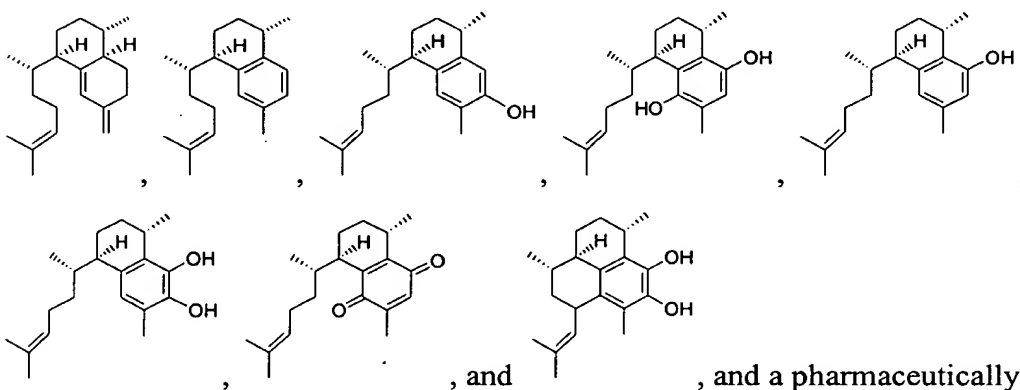


wherein  $R_1$  is a hydrogen or an alkyl or acyl residue having from 1 to 6 carbon atoms, and  $R_2$  is an organo group.

50. A compound having the structural formula:



51. A pharmaceutical composition comprising a therapeutically effective amount of a compound having the structural formula selected from the group consisting of:



excipient.

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